

IN THE CLAIMS:

Please amend the claims as set forth below:

1. (Original) A circuit comprising:

a first N-type transistor having a first terminal coupled to a power supply, a second terminal and a first gate terminal; and

a filter coupled between the power supply and the first gate terminal.

2. (Original) The circuit as recited in claim 1 wherein the filter is configured to reduce noise from the power supply at the first gate terminal.

3. (Original) The circuit as recited in claim 1 wherein the filter is a low pass filter.

4. (Original) The circuit as recited in claim 3 wherein the low pass filter includes a resistor coupled between the power supply and the first gate terminal and a capacitor coupled between the first gate terminal and ground.

5. (Original) The circuit as recited in claim 1 wherein the second terminal is coupled to supply current to a second transistor.

6. (Original) The circuit as recited in claim 5 wherein the second transistor includes a third terminal, a fourth terminal, and a second gate terminal, and wherein the third terminal is coupled to the second terminal, and wherein the fourth terminal is an output voltage node.

7. (Original) The circuit as recited in claim 6 wherein the second gate terminal is coupled to the output of an operational amplifier circuit, and wherein an output voltage on the output voltage node is a regulated output voltage, and wherein the fourth terminal is coupled to a feedback network which is further coupled to an input of the operational

amplifier.

8. (Original) The circuit as recited in claim 7 wherein the second gate terminal is coupled to the output of a bandgap generator, and wherein an output voltage on the output voltage node is a reference voltage used as an input to an operational amplifier circuit.

9-15 (Cancelled)

16. (Original) A circuit comprising:

an operational amplifier (op amp);

a first transistor having a gate terminal coupled to an output of the op amp and having a first terminal and a second terminal, the first terminal being an output to which a load is couplable, the load being capable of drawing a variable current from the first terminal during operation; and

a first current source coupled to the first terminal, the first current source drawing a first current from the first terminal which is inversely proportional to the current drawn by the load during operation.

17. (Original) The circuit as recited in claim 16 wherein the first current source comprises a second transistor, the second transistor being N-type and having a second gate terminal coupled to the output of the op amp, at third terminal coupled to the first terminal, and a fourth terminal coupled to ground.

18. (Original) The circuit as recited in claim 17 wherein the first terminal is coupled to a feedback network which is further coupled as an input to the op amp.

19. (New) A carrier medium comprising a database which is operated upon by a program executable on a computer system, the program operating on the database to perform a

portion of a process to fabricate an integrated circuit including circuitry described by the database, the circuitry described in the database including:

a first N-type transistor having a first terminal coupled to a power supply, a second terminal and a first gate terminal; and

a filter coupled between the power supply and the first gate terminal.

20. (New) The carrier medium as recited in claim 19 wherein the filter is configured to reduce noise from the power supply at the first gate terminal.

21. (New) The carrier medium as recited in claim 19 wherein the filter is a low pass filter.

22. (New) The carrier medium as recited in claim 21 wherein the low pass filter includes a resistor coupled between the power supply and the first gate terminal and a capacitor coupled between the first gate terminal and ground.

23. (New) The carrier medium as recited in claim 19 wherein the second terminal is coupled to supply current to a second transistor.

24. (New) The carrier medium as recited in claim 23 wherein the second transistor includes a third terminal, a fourth terminal, and a second gate terminal, and wherein the third terminal is coupled to the second terminal, and wherein the fourth terminal is an output voltage node.

25. (New) The carrier medium as recited in claim 24 wherein the second gate terminal is coupled to the output of an operational amplifier circuit, and wherein an output voltage on the output voltage node is a regulated output voltage, and wherein the fourth terminal is coupled to a feedback network which is further coupled to an input of the operational amplifier.

26. (New) The carrier medium as recited in claim 25 wherein the second gate terminal is coupled to the output of a bandgap generator, and wherein an output voltage on the output voltage node is a reference voltage used as an input to an operational amplifier circuit.
27. (New) A carrier medium comprising a database which is operated upon by a program executable on a computer system, the program operating on the database to perform a portion of a process to fabricate an integrated circuit including circuitry described by the database, the circuitry described in the database including:
- an operational amplifier (op amp);
- a first transistor having a gate terminal coupled to an output of the op amp and having a first terminal and a second terminal, the first terminal being an output to which a load is couplable, the load being capable of drawing a variable current from the first terminal during operation; and
- a first current source coupled to the first terminal, the first current source drawing a first current from the first terminal which is inversely proportional to the current drawn by the load during operation.
28. (New) The carrier medium as recited in claim 27 wherein the first current source comprises a second transistor, the second transistor being N-type and having a second gate terminal coupled to the output of the op amp, at third terminal coupled to the first terminal, and a fourth terminal coupled to ground.
29. (New) The carrier medium as recited in claim 28 wherein the first terminal is coupled to a feedback network which is further coupled as an input to the op amp.